MGA

A GUIDE FOR YOUR ENJOYMENT

TABLE COLOR TV

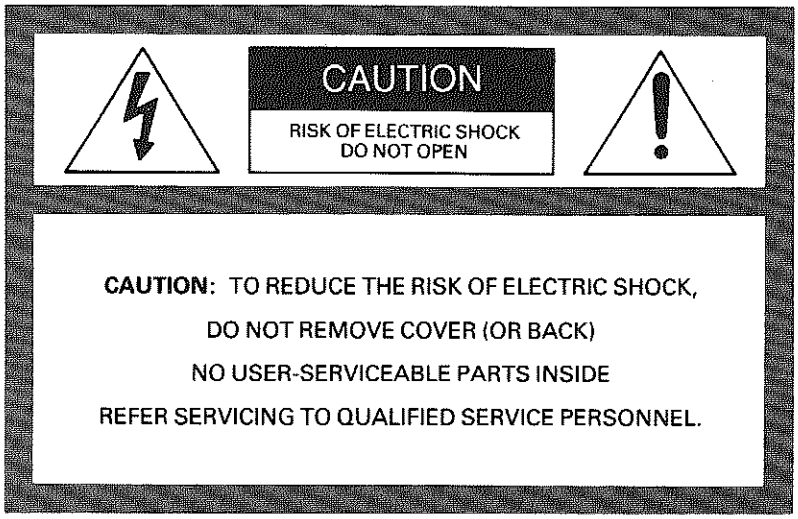
MODEL

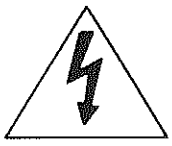
CS-2015R

For future reference, record the serial number of your TV in the space below.

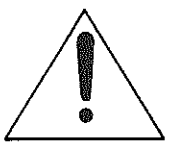
SERIAL No. [ ]

The serial number is located on the rear cover of the set.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK)
NO USER-SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

NOTE TO CATV SYSTEM INSTALLER:

THIS REMINDER IS PROVIDED TO CALL THE CATV SYSTEM INSTALLER'S ATTENTION TO ARTICLE 820-22 OF THE NEC THAT PROVIDES GUIDELINES FOR PROPER GROUNDING AND, IN PARTICULAR, SPECIFIES THAT THE CABLE GROUND SHALL BE CONNECTED TO THE GROUNDING SYSTEM OF THE BUILDING, AS CLOSE TO THE POINT OF CABLE ENTRY AS PRACTICAL.

IMPORTANT SAFEGUARDS

PLEASE READ ALL THESE INSTRUCTIONS REGARDING YOUR TELEVISION SET AND RETAIN FOR FUTURE REFERENCES. FOLLOW ALL WARNINGS AND INSTRUCTIONS MARKED ON THE TV RECEIVER.

1. Read Instructions
   All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions
   The safety and operating instructions should be retained for future reference.
3. Heed Warnings
   All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions
   All operating and use instructions should be followed.
5. Cleaning
   Unplug this TV receiver from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
6. Attachments and Equipment
   Never add any attachments and/or equipment without approval of the manufacturer as such additions may result in the risk of fire, electric shock, or other personal injury.
7. Water and Moisture
   Do not use this TV receiver where contact with or immersion in water is a possibility. Do not use near: bath tubs, wash bowls, kitchen sinks, laundry tubs, or swimming pools, etc.
8. Accessories
   Do not place this TV receiver on an unstable cart, stand, tripod, bracket, or table. The TV receiver may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod bracket, or table recommended by the manufacturer, or sold with the TV receiver. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

   An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

S3226A

9. Ventilation
   Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the TV receiver and to protect it from overheating. Do not block these openings or allow them to be blocked by placing the TV receiver on a bed, sofa, rug, or other similar surface. Nor should it be placed over a radiator or heat register. If the TV receiver is to be placed in a rack or bookcase, insure that there is adequate ventilation and that the manufacturer's instructions have been adhered to.
10. Power Sources
    This TV receiver should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company.
11. Grounding or Polarization
    For your safety, this TV receiver is equipped with a polarized alternating-current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of polarized plug.
12. Power-Cord Protection
    Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
13. Lightning
    For added protection for this TV receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.
14. Power Lines
    An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

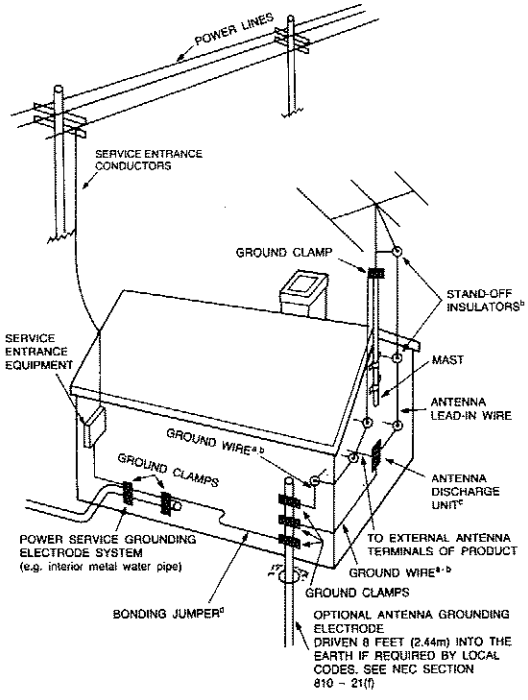
15. Overloading
Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

16. Object and Liquid Entry
Never push objects of any kind into this TV receiver through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the TV receiver.

17. Outdoor Antenna Grounding
If an outside antenna or cable system is connected to the TV receiver be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges.

Section 810 of the National Electrical Code, ANSI/NFPA No. 70 - 1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF ANTENNA GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE INSTRUCTIONS CONTAINED IN ARTICLE 810 - "RADIO AND TELEVISION EQUIPMENT"


POWER LINES
SERVICE ENTRANCE CONDUCTORS
GROUND CLAMP
STAND-OFF INSULATORS[b]
SERVICE ENTRANCE EQUIPMENT
MAST
ANTENNA LEAD-IN WIRE
GROUND WIRE[a,b]
GROUND CLAMPS
ANTENNA DISCHARGE UNIT[c]
POWER SERVICE GROUNDING ELECTRODE SYSTEM (e.g. interior metal water pipe)
TO EXTERNAL ANTENNA TERMINALS OF PRODUCT
GROUND WIRE[a,b]
GROUND CLAMPS
BONDING JUMPER[d]
OPTIONAL ANTENNA GROUNDING ELECTRODE DRIVEN 8 FEET (2.44m) INTO THE EARTH IF REQUIRED BY LOCAL CODES. SEE NEC SECTION 810 - 21(f)

[a] Use No. 10 AWG (5.3 mm²) copper, No. 8 AWG (8.4 mm²) aluminum. No. 17 AWG (1.0 mm²) copper-clad steel or bronze wire, or larger, as a ground wire.

[b] Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4-6 feet (1.22-1.83m) apart.

[c] Mount antenna discharge unit as close as possible to where lead-in enters house.

[d] Use jumper wire not smaller than No. 6 AWG (13.3 mm²) copper, or the equivalent, when a separate antenna-grounding electrode is used.

18. Servicing
Do not attempt to service this TV receiver yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

19. Damage requiring Service
Unplug this TV receiver from the wall outlet and refer servicing to qualified service personnel under the following conditions:
(a) When the power-supply cord or plug is damaged.
(b) If liquid has been spilled, or objects have fallen into the TV receiver.
(c) If the TV receiver has been exposed to rain or water.
(d) If the TV receiver does not operate normally by following the operating instructions.
Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the TV receiver to its normal operation.
(e) If the TV receiver has been dropped or the cabinet has been damaged.
(f) When the TV receiver exhibits a distinct change in performance — this indicates a need for service.

20. Replacement Parts
When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

21. Safety Check
Upon completion of any service or repairs to this TV receiver ask the service technician to perform safety checks to determine that the TV receiver is in safe operating conditions.

CONTENTS

FEATURES AND FUNCTIONS
- FRONT PANEL CONTROLS – LOCATION AND DESCRIPTION 5
- REAR PANEL TERMINOLOGY AND DESCRIPTION 6

REMOTE CONTROL TRANSMITTER FUNCTIONS AND FEATURES 7, 8

CONNECTING YOUR TV TO AN ANTENNA, CABLE, OR VCR
- GLOSSARY OF CONNECTORS 9
- SEPARATE VHF AND UHF ANTENNA 10
- VHF / UHF ANTENNA OR CABLE 10
- VCR AND VHF / UHF ANTENNA OR VCR AND CABLE 11
- AUDIO SYSTEM 12

CHANNEL SELECTION 13, 14

AUDIO RECEPTION 15

AV ADJUSTMENT
- AUDIO ADJUSTMENT 16, 17
- VIDEO ADJUSTMENT 18, 19

SETTING THE PRESENT TIME 20, 21

OFF TIMER 22

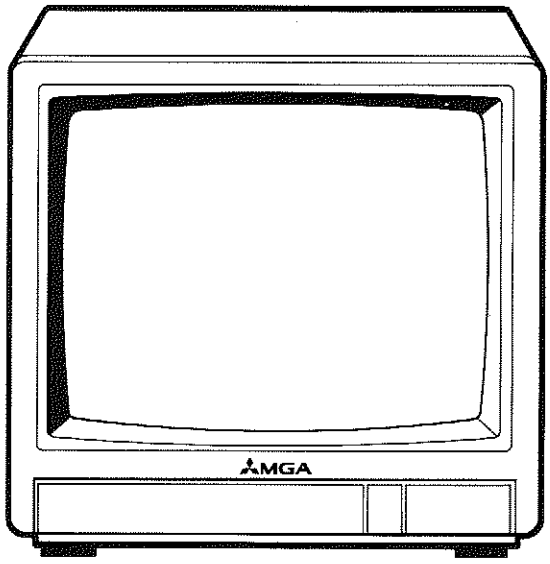
ON-SCREEN INFORMATION DISPLAY 23

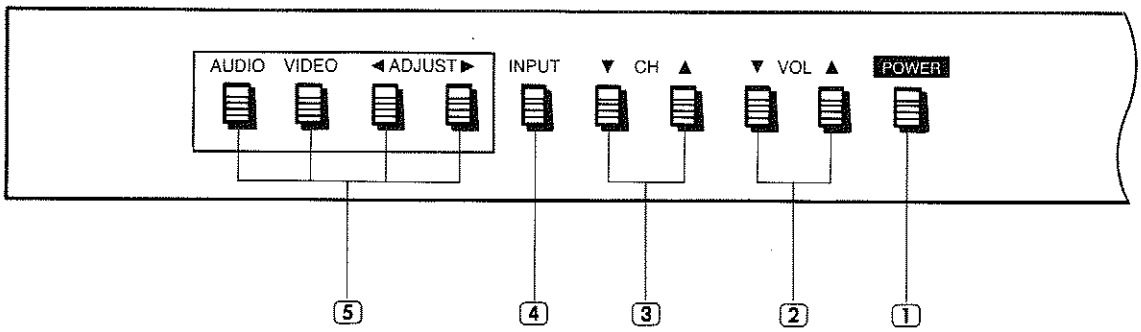
ACCESSORIES

- REMOTE CONTROL TRANSMITTER
- BATTERIES (SIZE AAA)
- LIMITED WARRANTY CARD

FEATURES AND FUNCTIONS

FRONT PANEL CONTROLS — LOCATION AND DESCRIPTION





1 POWER BUTTON
Press the power button to turn the power on. Press again to turn the power off.

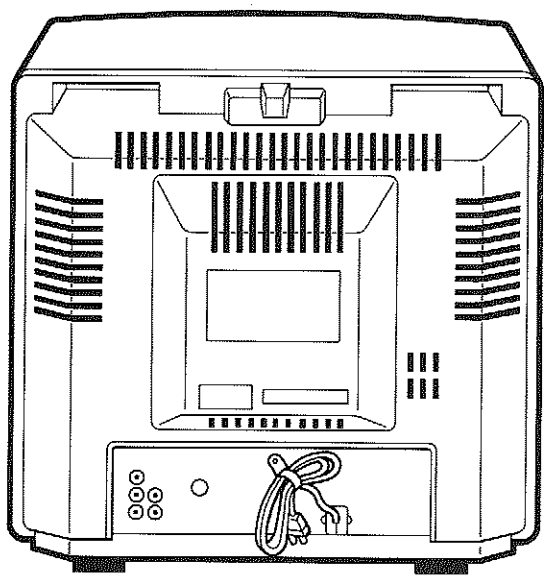
2 AUDIO VOLUME CONTROLS
Press the VOL▲ button to increase the volume or the VOL▼ button to decrease the volume. The volume adjustment is gradual and continuous until either button is released.

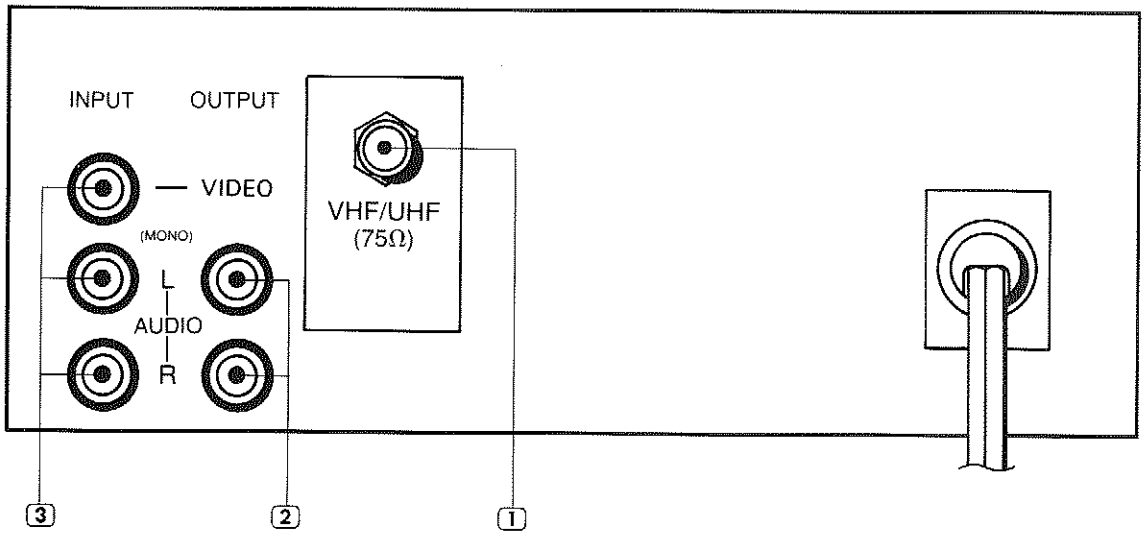
3 CHANNEL SELECTOR BUTTONS
The viewing channel may be selected by pressing the channel selector button marked CH▲ to switch to a higher channel or by pressing button marked CH▼ to switch to a lower channel.

4 INPUT BUTTON
Press to switch between TV tuner or equipment hooked-up to the EXT input.

5 AUDIO VIDEO CONTROL BUTTONS
These buttons are adjusted to obtain optimum picture and audio quality. Refer to the "AV ADJUSTMENT" Section for details. (See page 16, 17, 18 and 19)

REAR PANEL TERMINOLOGY AND DESCRIPTION





1 75ΩF TYPE CONNECTOR VHF / UHF ANTENNA TERMINAL

2 AUDIO OUTPUT TERMINAL
The AUDIO OUTPUT terminals (RCA-type, variable) are used for direct connection to the high level (AUX) terminals of an audio amplifier.

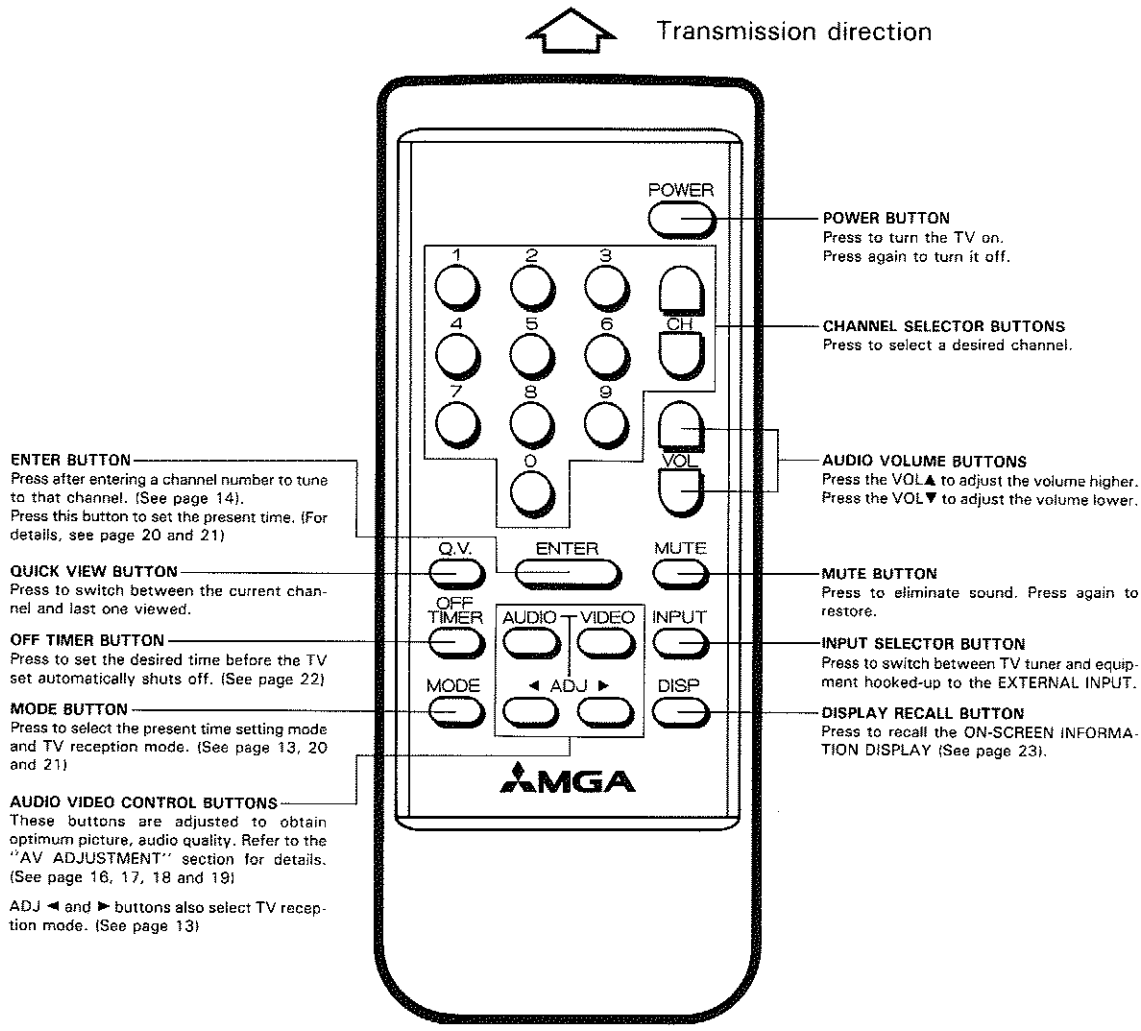
Note: The volume level of the signal from the AUDIO OUTPUT terminals is adjusted with the VOL▲ and VOL▼ controls.

3 AUDIO AND VIDEO INPUT TERMINALS
The AUDIO and VIDEO INPUT terminals (RCA-type) are used for direct connection to the audio and video output from a VCR, Video Disc Player, etc.

For devices which have a monaural output only, connect the audio output cable to the L (MONO) input terminal.

REMOTE CONTROL TRANSMITTER FUNCTIONS AND FEATURES

DESCRIPTION AND FUNCTIONS


Transmission direction
POWER
1
2
3
4
5
6
7
8
9
0
CH
VOL
Q.V.
ENTER
MUTE
OFF TIMER
AUDIO
VIDEO
INPUT
MODE
◄ ADJ ►
DISP
MGA
POWER BUTTON
Press to turn the TV on.
Press again to turn it off.
CHANNEL SELECTOR BUTTONS
Press to select a desired channel.
AUDIO VOLUME BUTTONS
Press the VOL▲ to adjust the volume higher.
Press the VOL▼ to adjust the volume lower.
ENTER BUTTON
Press after entering a channel number to tune to that channel. (See page 14).
Press this button to set the present time. (For details, see page 20 and 21)
QUICK VIEW BUTTON
Press to switch between the current channel and last one viewed.
OFF TIMER BUTTON
Press to set the desired time before the TV set automatically shuts off. (See page 22)
MODE BUTTON
Press to select the present time setting mode and TV reception mode. (See page 13, 20 and 21)
AUDIO VIDEO CONTROL BUTTONS
These buttons are adjusted to obtain optimum picture, audio quality. Refer to the "AV ADJUSTMENT" section for details. (See page 16, 17, 18 and 19)
ADJ ◄ and ► buttons also select TV reception mode. (See page 13)
MUTE BUTTON
Press to eliminate sound. Press again to restore.
INPUT SELECTOR BUTTON
Press to switch between TV tuner and equipment hooked-up to the EXTERNAL INPUT.
DISPLAY RECALL BUTTON
Press to recall the ON-SCREEN INFORMATION DISPLAY (See page 23).

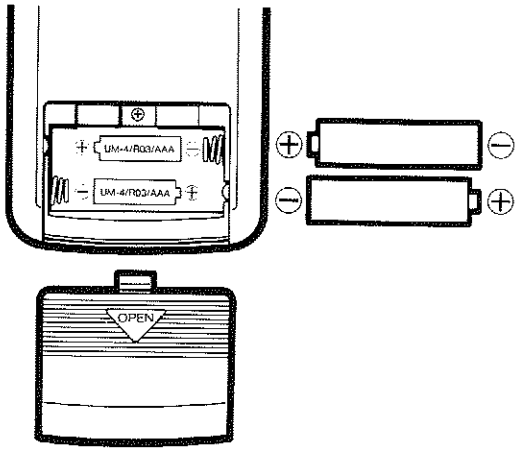
1. Point the top of the remote control transmitter towards the front of the television.
2. Press the desired function button on the remote control transmitter. For best performance, the remote control transmitter should be within 20 feet of the TV, at no more than a 30° angle from the front of the TV.

BATTERY INSTALLATION

1. Remove the packing and take out the remote control unit and the two size "AAA" batteries.
2. Remove the cover of the battery compartment in the direction shown by the arrow.
3. Load the two batteries as shown and replace the cover.

   Make sure that the polarities, + and −, are properly aligned.

   Note: 1. Do not use a new battery with an old one.
   2. Do not heat, disassemble, short or throw batteries into a fire.



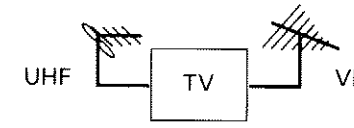
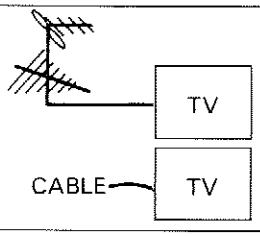
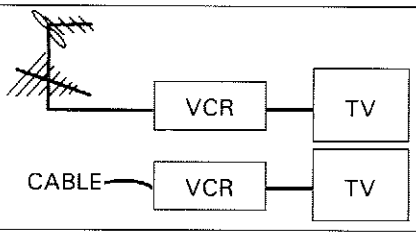
CAUTIONS FOR REMOTE CONTROL TRANSMITTER OPERATION

1. Pressing two or more function buttons on the remote control transmitter may result in improper operation.
2. Do not place the remote control transmitter in damp or wet areas.
3. Avoid dropping the remote control transmitter on hard surfaces.
4. To clean, wipe the remote control transmitter using a soft cloth slightly moistened with a mild detergent and then dry completely with a soft cloth. Do not use benzene, thinners or other petroleum based cleaners.
5. If you lose or misplace the remote control transmitter, you can purchase a replacement from your dealer.

CONNECTING YOUR TV TO AN ANTENNA, CABLE, OR VCR.

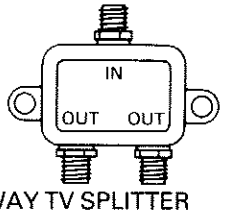
The instructions detailed in the next pages represent the most common hookup configurations. If your system requirements are not shown, please consult your dealer or cable company for additional information.

SELECT THE CONNECTION PROCEDURE THAT INCLUDES THE EQUIPMENT YOU WISH TO HOOK UP.

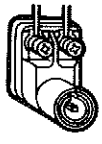
		PAGE
SEPARATE UHF AND VHF ANTENNAS		10
VHF / UHF ANTENNA OR CABLE		10
VCR and VHF/UHF ANTENNA OR VCR AND CABLE		11
AUDIO SYSTEM		12

GLOSSARY OF CONNECTORS

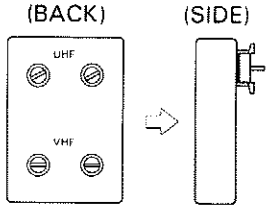
(AVAILABLE AT YOUR LOCAL ELECTRONICS DEALER)



2-WAY TV SPLITTER FOR 75Ω COAXIAL CABLE

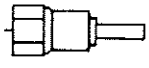


300Ω TO 75Ω MATCHING TRANSFORMER



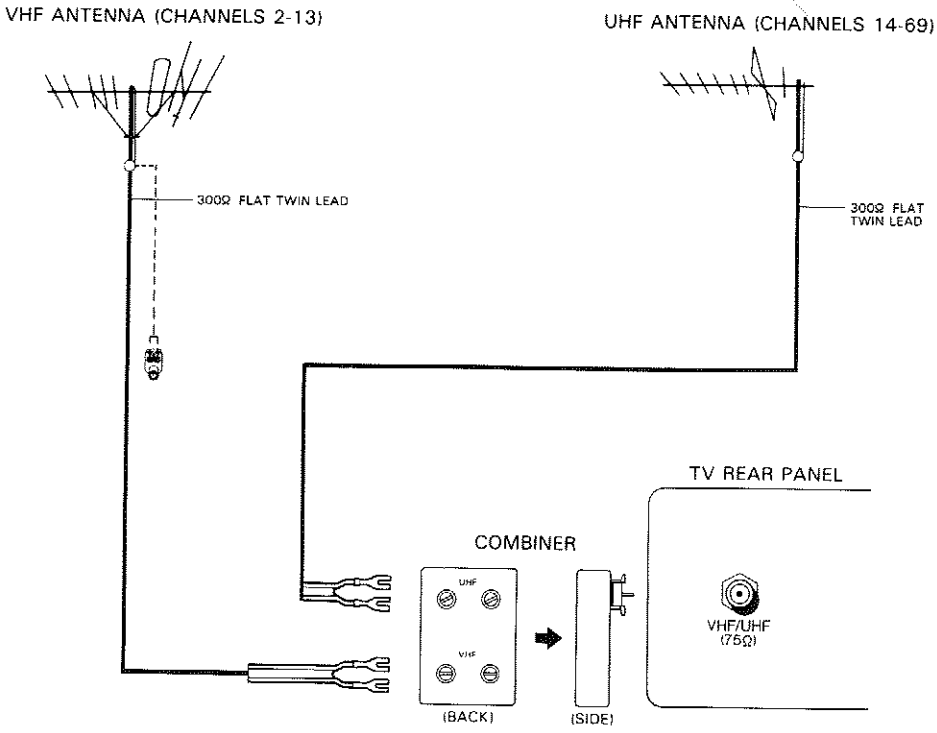
300Ω TO 75Ω COMBINER

SHIELDED SIGNAL CABLE WITH RCA CONNECTORS

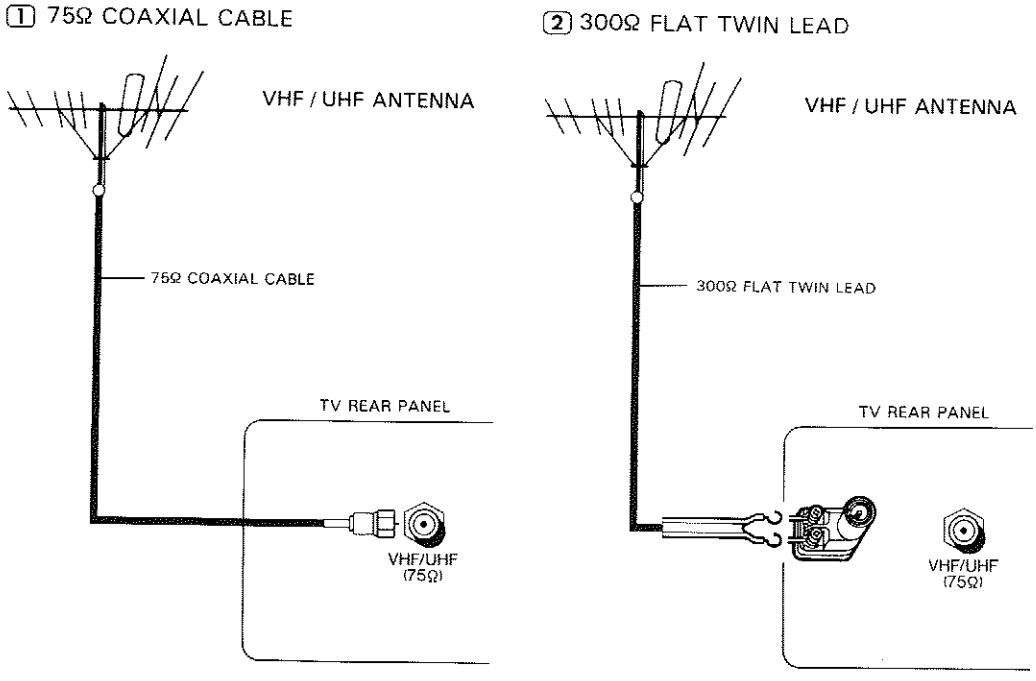


75Ω ROUND COAXIAL CABLE

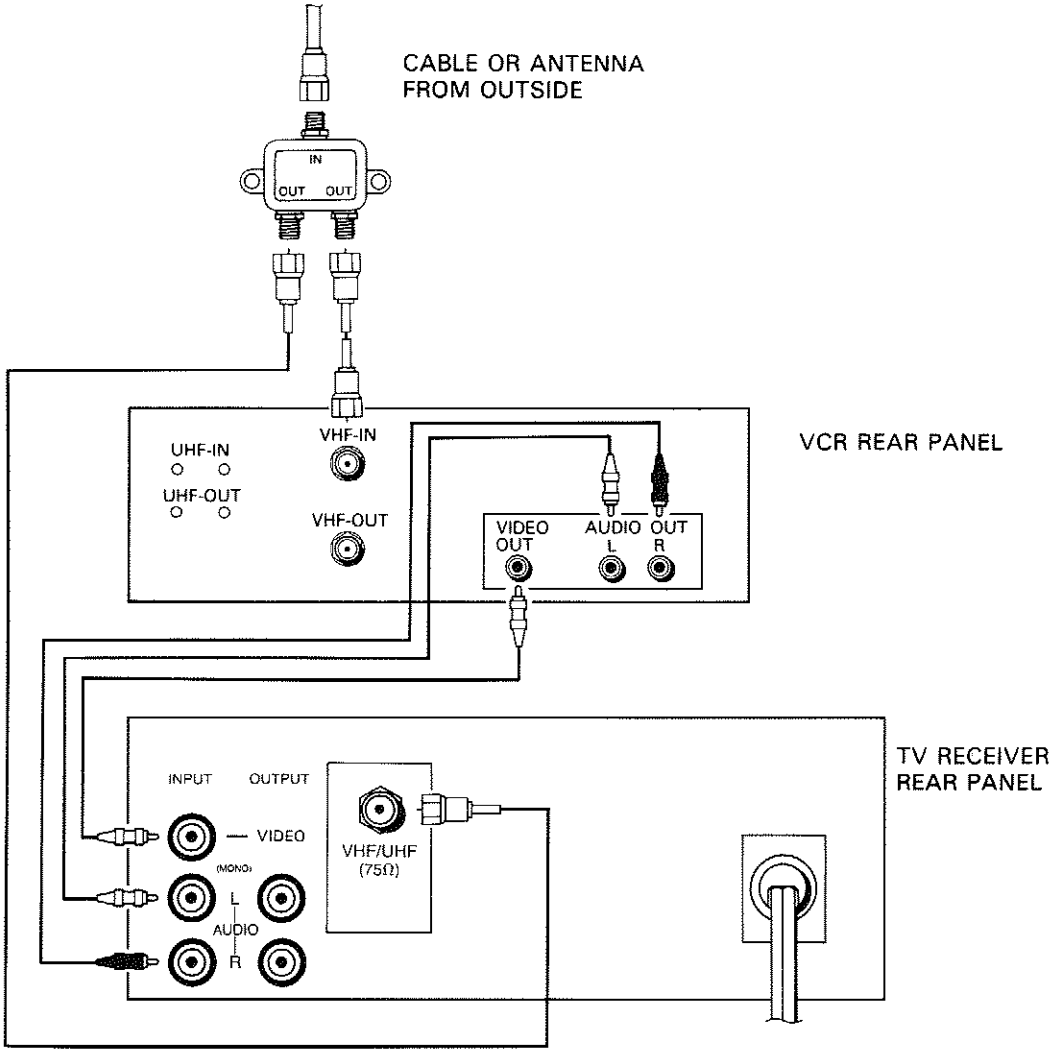
SEPARATE UHF AND VHF ANTENNAS



VHF/UHF ANTENNA OR CABLE



VCR AND VHF/UHF ANTENNA OR VCR AND CABLE

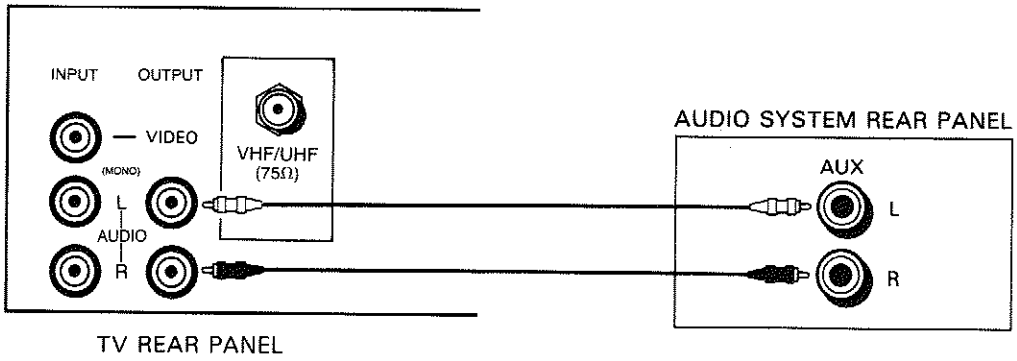


[1] Connect the equipment as shown using standard RCA type shielded cables and coaxial cable. If your VCR is monaural (has only one audio channel) connect it to the "L" INPUT so that both channels in the set will operate.

[2] Place the VCR in the playback mode.

[3] Select the EXT INPUT using the INPUT button on the front panel or on the remote control.

AUDIO SYSTEM



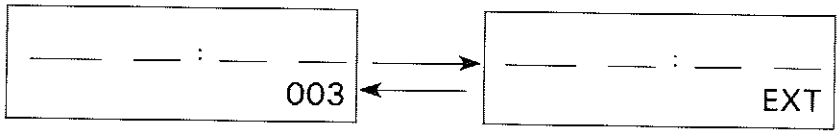
1. Connect the AUDIO OUTPUT terminals to the AUX IN terminals of your audio system as shown using standard RCA type shielded cables.
2. Turn the built-in speakers off by pressing the AUDIO function button until the SPEAKER display appears. Then set the speaker to OFF by pressing the ADJUST ◄ or ► button.
3. Set the audio system input selector to the AUX position.
4. The VOLume, MUTE, and BALANCE controls of the TV will control the volume of the sound through the audio system AUX input.

Note: Set the audio system's volume control to a comfortable listening level. The TV's volume control can now vary the volume level heard through the audio system. Maximum volume can be no louder than the volume setting of the audio system. To increase the loudness, increase the volume of the audio system.

CHANNEL SELECTION

A INPUT MODE SELECTION (TV, EXT)

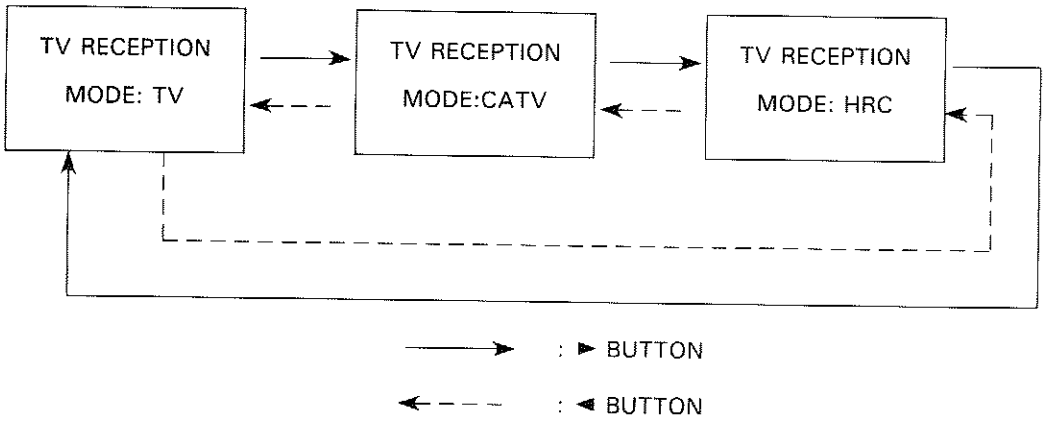
Press the INPUT button on the front panel or on the remote control to change active input as follows.



TV EXT

B RECEPTION MODE SELECTION (TV, CATV, HRC)

Press the MODE button on the remote control until the TV reception mode appears on the screen. Press the ADJUST ◄ or ► button to select the desired mode.



The reception mode is factory preset for CATV

Some cable systems use "HRC" to reduce adjacent channel interference.

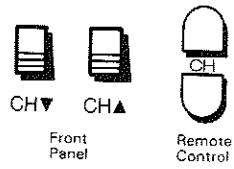
If the cable to which you subscribe uses "HRC" then select "HRC"

C CHANNEL SELECTION

Channel selection is made using the channel selector buttons. The buttons numbered 0 through 9 on the remote control transmitter are used for direct channel selection. The buttons marked ▲ and ▼ are used for automatic scan channel selection.

AUTOMATIC SCAN CHANNEL SELECTION

Press the channel selector buttons marked ▲ or ▼ for automatic scan channel selection. Pressing the channel selector button marked ▲ switches to the next higher channel available, skipping any inactive channels in-between. Pressing the channel selector button marked ▼ switches to the next lower channel available, skipping inactive channels in-between. Pressing continuously continues the scan until the button is released.



RANDOM ACCESS TUNING (10 KEYPAD and ENTER KEY).

There are 3 methods to directly access a TV channel:

1. Key in the desired channel number, then press the ENTER key.
2. Key in the desired channel number without using the ENTER key. Using this method, the new channel selection appears after 3 seconds delay.
3. Key in the 3 digits of the channel number. The new channel appears after entering the last digit.

e.g. To tune channel "23".

1. ② → ③ → ENTER

2. ② → ③ → 3 seconds

3. ⓪ → ② → ③

Note: When tuning cable stations (CATV or HRC) channel numbers 0 and greater than 126 are unassigned. When tuning TV stations (TV) 0, 1 and 70 through 999 are unassigned. If these channel numbers are pressed the channel remains unchanged.

	VHF L			MID		VHF H	SUPER		HYPER			UHF/ULTRA
TV	2~4		5~6	–		7~13	–		–			14~69
CABLE, HRC	2 ~ 4	5A (01)	5 ~ 6	A-5(95)	A(14)	7~13	J(23)	Q(30)	W+ 1(37)	W+ 11(47)	W+ 20(56)	W+29(65) ~ W+58(94) – W+59(100) ~ W+84(125)
				A-4(96)	B(15)		K(24)	R(31)	W+ 2(38)	W+ 12(48)	W+ 21(57)	
				A-3(97)	C(16)		L(25)	S(32)	W+ 3(39)	W+ 13(49)	W+ 22(58)	
				A-2(98)	D(17)		M(26)	T(33)	W+ 4(40)	W+ 14(50)	W+ 23(59)	
				A-1(99)	E(18)		N(27)	U(34)	W+ 5(41)	W+ 15(51)	W+ 24(60)	
					F(19)		O(28)	V(35)	W+ 6(42)	W+ 16(52)	W+ 25(61)	
					G(20)		P(29)	W(36)	W+ 7(43)	W+ 17(53)	W+ 26(62)	
					H(21)				W+ 8(44)	W+18 (54)	W+ 27(63)	
					I(22)				W+ 9(45)	W+ 19(55)	W+ 28(64)	
									W+ 10(46)			

QUICK VIEW TUNING

Press to switch between the current channel and the last one viewed. QUICK VIEW (Q.V.) is available from the remote control transmitter only.

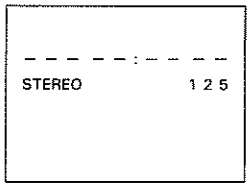
AUDIO RECEPTION

This set is equipped to receive stereo broadcast and SAP (Separate Audio Program) transmission. In addition, a sound expansion circuit is provided to simulate stereo sound when receiving monaural broadcasts, cable TV, or signals from external units connected to the rear panel audio inputs.

Note: Stereo broadcasts and SAP transmissions conform to the Broadcast Television Systems Committee (BTSC) standard only. Stereo audio transmission from CATV (CABLE or HRC) system can vary from area to area and may not be available or compatible with the BTSC standard. Check with your local cable company for specific compatibility requirements.

STEREO RECEPTION

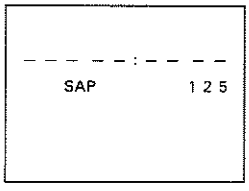
The STEREO indicator will appear on screen if a STEREO broadcast is present. To listen to the stereo broadcast, make sure the SELECTED AUDIO MODE is set to "STEREO" using the AUDIO function and ADJUST buttons. (See page 16)



SAP (SEPARATE AUDIO PROGRAM) RECEPTION

The Separate Audio Program is a monaural channel provided for by the BTSC (Broadcast Television Systems Committee) standard. Transmission of the SAP channel is at the option of the local broadcast station and may not be present along with the stereo broadcast signal.

The SAP indicator will appear on screen if a SAP broadcast is present. To listen to the SAP broadcast, make sure the SELECTED AUDIO mode is set to "SAP" using the AUDIO function and ADJUST buttons. (See page 16)



MONO RECEPTION

Occasionally a stereo broadcast may contain excessive background noise (hiss) particularly in "fringe" areas located far from the TV station.

To reduce background noise, select mono mode.

In the mono reception mode, the audio program is reproduced in mono even when the broadcast signal is stereo.

Note: MONO should be used only when background noise is objectionable. For normal use, set to the STEREO mode.

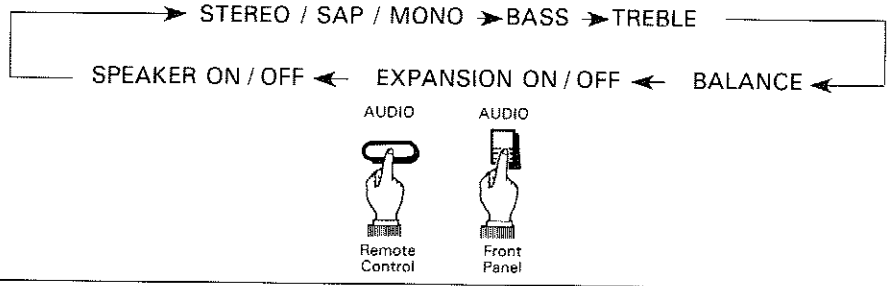
AUDIO EXPANSION

AUDIO EXPANSION is a special circuit designed to provide a simulated stereo effect when used with monaural broadcasts or playback from monaural external units (VCR, video disc player, etc.) connected to the rear panel AUDIO / VIDEO inputs.

AV ADJUSTMENT

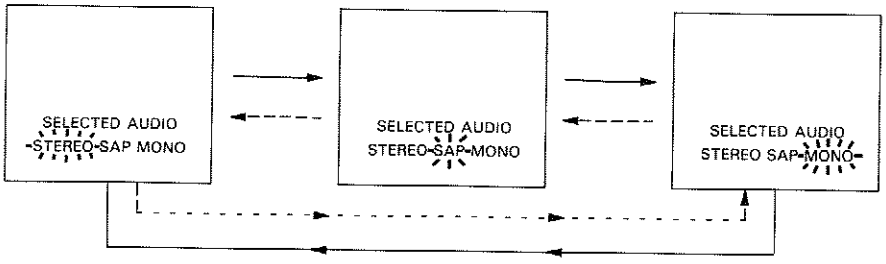
AUDIO ADJUSTMENT

Press the AUDIO button repeatedly to change the active selection as follows.



STEREO/SAP /MONO

- Press the AUDIO function button until the SELECTED AUDIO display appears.
- Press the ADJUST ◄ or ► button to select the active audio reception. (Flashing)
- On-screen display will remain for 5 seconds after the desired mode has been set.

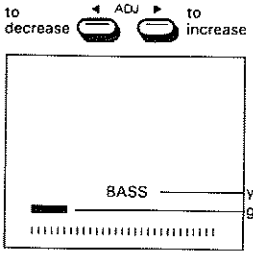


- Selected mode flashes.

——► : ► *BUTTON*
◄----- : ◄ *BUTTON*

AUDIO BASS CONTROL

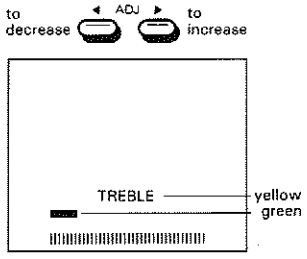
- Press the AUDIO function button until the BASS display appears..



The audio BASS control adjusts the volume level of low frequencies. Press the ADJUST ► button to increase the volume level of low frequencies or the ADJUST ◄ button to decrease the volume level of low frequencies.

The audio BASS control adjustment is gradual and continuous until either button is released.

AUDIO TREBLE CONTROL

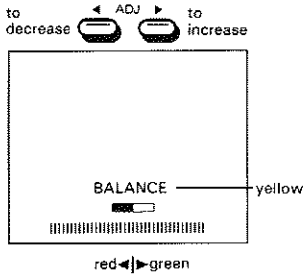


• Press the AUDIO function button until the TREBLE display appears.

The audio TREBLE control adjusts the volume level of high frequencies. Press the ADJUST ► button to increase the volume level of high frequencies or the ADJUST ◄ button to decrease the volume level of high frequencies.

The audio TREBLE adjustment is gradual and continuous until either button is released.

AUDIO BALANCE CONTROL



• Press the AUDIO function button until the BALANCE display appears.

The audio BALANCE control adjusts the volume level between the two speakers. Press the ADJUST ► button to increase the volume level of the right channel speaker or the ADJUST ◄ button to increase the volume level of the left channel speaker.

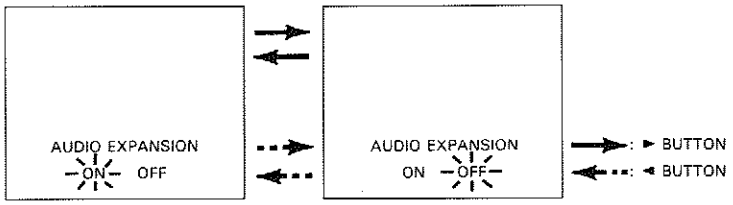
The audio BALANCE adjustment is gradual and continuous until either button is released.

AUDIO EXPANSION

Remote Control

• Press the AUDIO function button until the AUDIO EXPANSION display appears.

Press the ADJUST ◄ or ► button to set the audio expansion function ON or OFF.



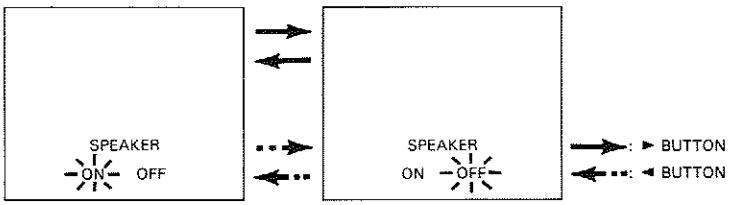
SPEAKER

Remote Control

• Press the AUDIO function button until the speaker display appears.

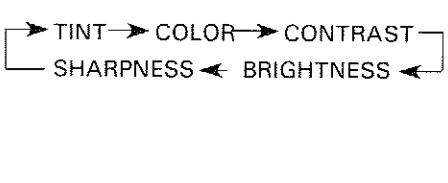
In the "ON" position, sound is heard through the TV's built in speakers. When the TV is connected to an external audio system, the internal speakers can be turned off.

Press the ADJUST ◄ or ► button to turn the speakers ON or OFF.

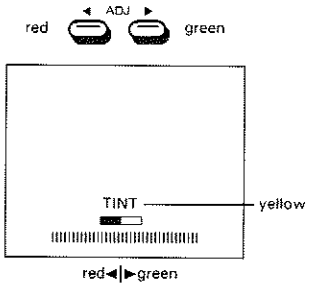


VIDEO ADJUSTMENT

Press the VIDEO button repeatedly to change the active selection as follows.



TINT CONTROL

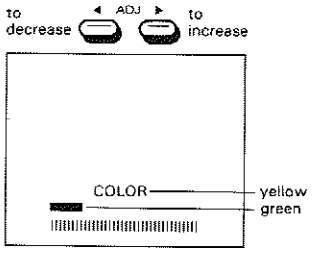


• Press the VIDEO function button until the TINT display appears.

The TINT control adjusts the delicate tones of color. Press the ADJUST ► button to add green tint to the color tone or the ADJUST ◄ button to add red tint to the color tone. Adjust to obtain the best flesh tones according to your preference

The TINT adjustment is gradual and continuous until either button is released.

COLOR CONTROL

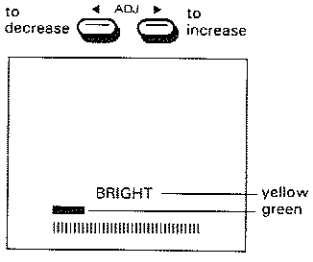


• Press the VIDEO function button until the COLOR display appears.

The COLOR control adjusts the color intensity of the picture. Press the ADJUST ► button to increase color intensity or the ADJUST ◄ button to decrease color intensity. Adjust to your preference.

The COLOR adjustment is gradual and continuous until either button is released.

CONTRAST CONTROL

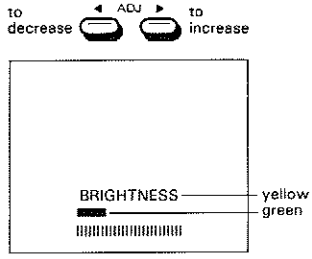


• Press the VIDEO function button until the CONTRAST display appears.

The CONTRAST control adjusts overall picture contrast level. Adjust to your preference. Press the ADJUST ◄ to decrease CONTRAST or the ADJUST ► to increase CONTRAST.

The CONTRAST adjustment is gradual and continuous until either button is released.

BRIGHTNESS CONTROL

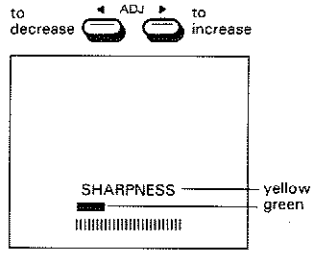


• Press the VIDEO function button until the BRIGHTNESS display appears.

The BRIGHTNESS control adjusts the "black level" of the picture. Adjust to your preference. Press the ADJUST ◄ to decrease BRIGHTNESS or the ADJUST ► to increase BRIGHTNESS.

The BRIGHTNESS adjustment is gradual and continuous until either button is released.

SHARPNESS CONTROL



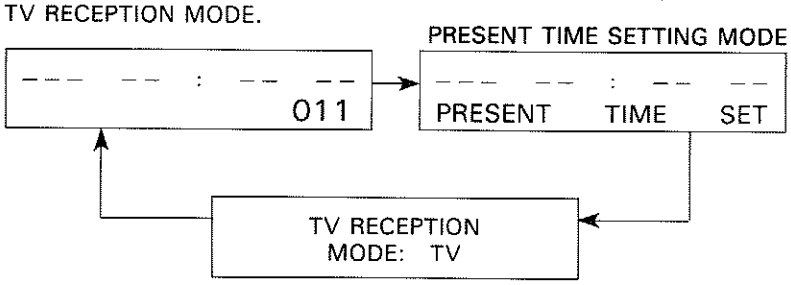
• Press the VIDEO function button until the SHARPNESS display pears.

The SHARPNESS control adjusts the picture sharpness. Press the ADJUST ► button to increase picture sharpness or the ADJUST ◄ button to decrease picture sharpness. Adjust to your preference.

The SHARPNESS adjustment is gradual and continuous until either button is released.

SETTING THE PRESENT TIME

The MODE button cycles between the TIME AND CHANNEL MODE, PRESENT TIME SETTING MODE, and the TV RECEPTION MODE.



1. Press the MODE button until the present time setting mode appears on the screen. The day of week display flashes.

2. Use the CHANNEL SELECTOR button to select the desired day of week.

   ① → SUN ② → MON ③ → TUE
   ④ → WED ⑤ → THU ⑥ → FRI
   ⑦ → SAT

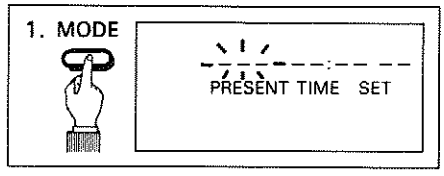
3. Press the ENTER button to set the day of week. The time display flashes.

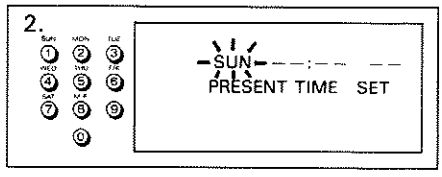
4. Use the CHANNEL SELECTOR buttons to set the present hour and minutes.

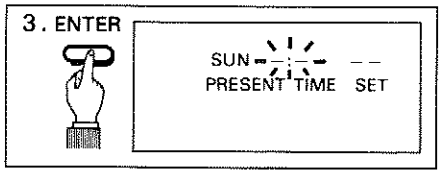
   EXAMPLE:

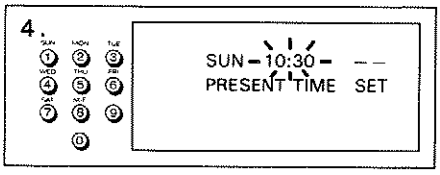
   To set the present time as 10:30, press the 1, 0, 3 and 0 buttons in sequence.

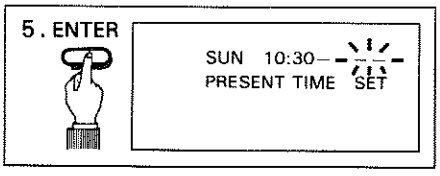
5. Press the ENTER button to set the time. The AM or PM display flashes.





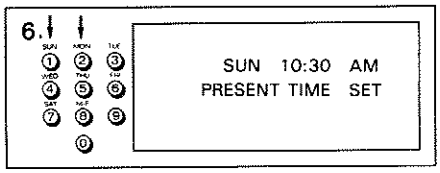




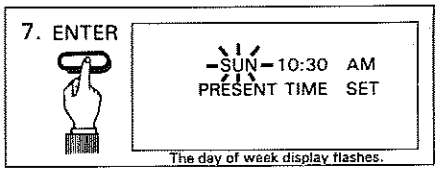


6. Press CHANNEL SELECTOR button ① or ② to select either "AM" or "PM".

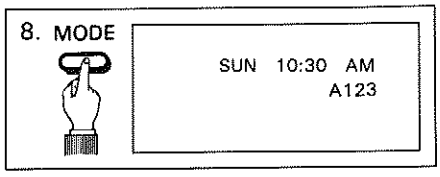
   ① → AM ② → PM



7. Press the ENTER button when the precise minute arrives to start clock.



8. To exit the PRESENT TIME SET mode press the MODE button until only the Time & Channel display appears. The on-screen display remains for 5 seconds.



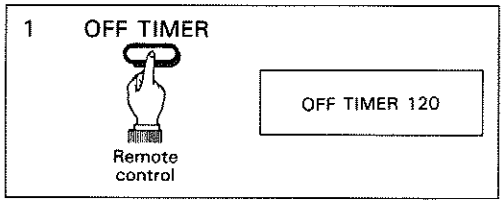
Note: The display will shut off if no entry is made within one minute.

OFF TIMER

The OFF TIMER is a built-in clocktimer which may be set to turn off the television after a preset time interval has elapsed. The off time is displayed on screen for 5 seconds when the OFF TIMER is set.

OPERATING THE OFF TIMER

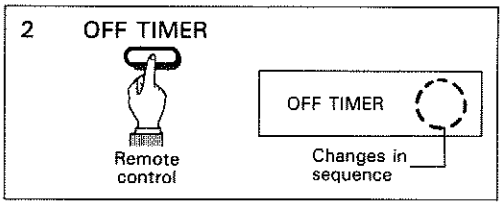
1. Press the "OFF TIMER" button on the remote control transmitter. The on-screen display appears.



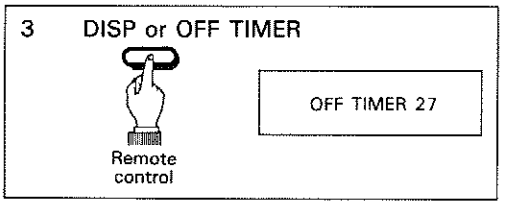
2. The desired time interval is set by repeatedly pressing the OFF TIMER button. The timer starts at 120 minutes and is adjusted in the following sequence:

   →120→110·····10→---

   The on-screen display will remain for 5 seconds after the desired time has been set.

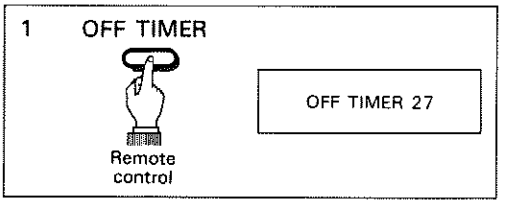


3. The remaining time may be checked by pressing the DISPlay button until the OFF TIMER display appears, or by pressing the OFF TIMER button once only. The remaining time is displayed on screen for 5 seconds. During the last minute before turning the set off, the off timer display will flash on screen.

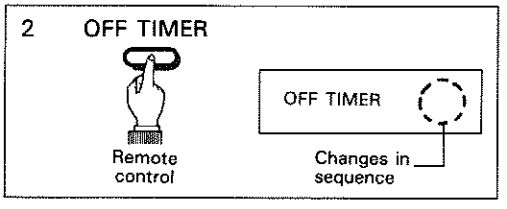


CHANGING OR CANCELLING THE OFF TIMER

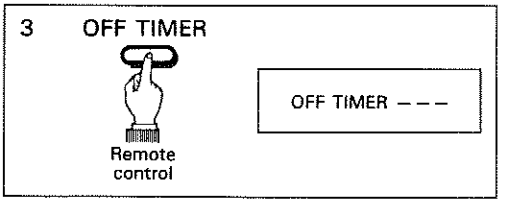
1. Press the OFF TIMER button. The remaining time is displayed on screen.



2. Press repeatedly to adjust to the desired off time. The timer is first adjusted to the next lower ten minute interval and then reduces the remaining time by 10 minutes according to the sequence described in the preceding section. When the "---" indication is displayed, press again to add the remaining time. For example, if 27 minutes remaining time is indicated, pressing the OFF TIMER button will produce the following sequence: 27, 20, 10, ---, 120, 110, 100...etc.



3. The OFF TIMER is cancelled by pressing the OFF TIMER button until the "---" indication is displayed.

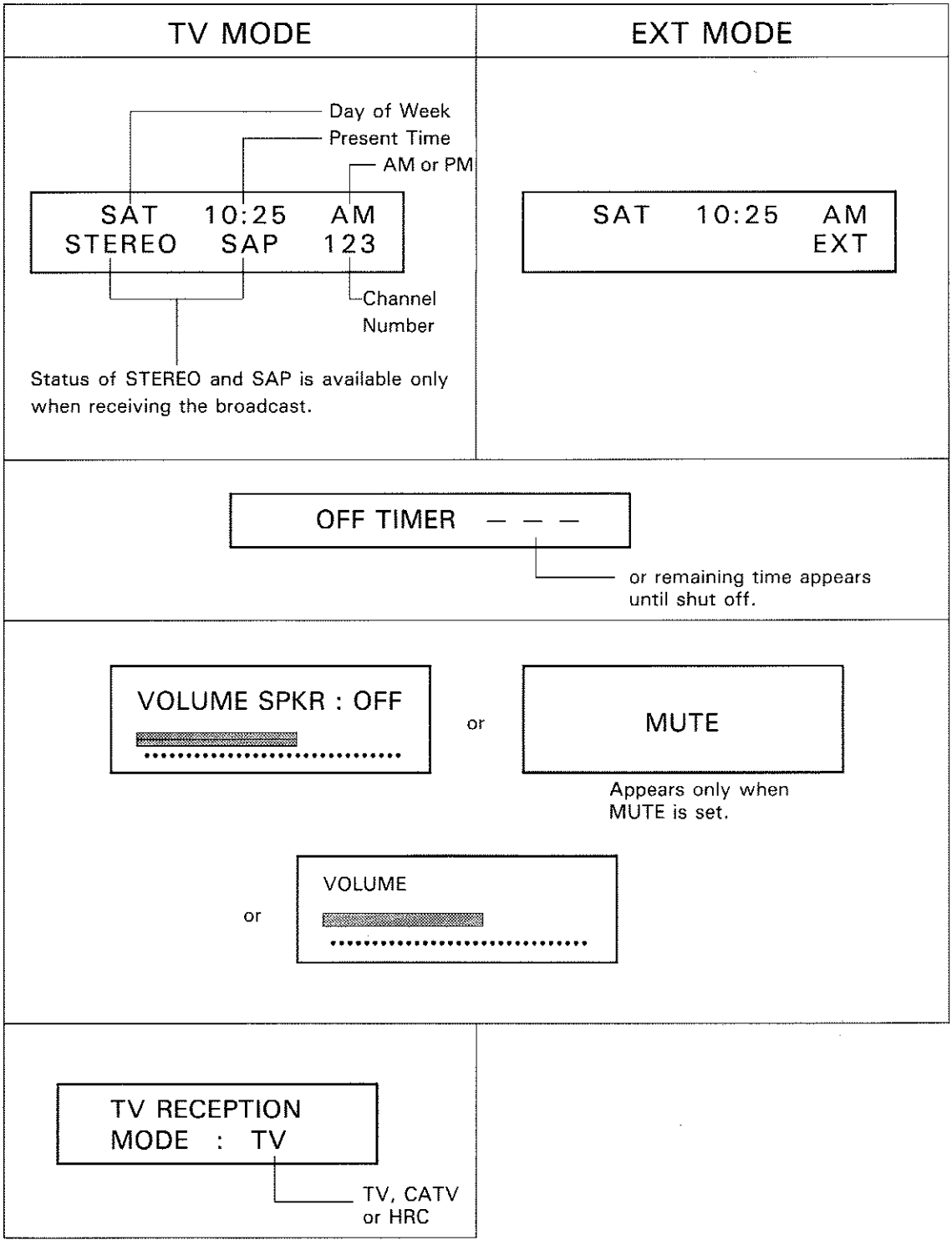


Turning the set off with the POWER button also cancels the OFF TIMER.

ON-SCREEN INFORMATION DISPLAY

This set is equipped with an on-screen mode display system allowing the user to check the operation status.

The displays illustrated below appear when DISPlay button is pressed repeatedly.



CAUTION AND CARE

- STILL PICTURE MAY CAUSE PERMANENT DAMAGE TO TV TUBE.
  Stationary scenes such as those generated from stock market reports or a video game; if left on screen too long can burn the phosphors of the TV tube. Avoid the use of any fixed pattern for longer than 10 minutes.
- BE CAREFUL REGARDING MAGNETIC INFLUENCES.
  If you plan to use external speakers next to the TV, make sure they are magnetically shielded. Ordinary speakers will cause distortion in the picture due to their strong magnets interfering with the picture tube.
- For maximum enjoyment and safe operation of your MITSUBISHI Color TV, please read the "IMPORTANT SAFEGUARDS" section carefully and apply them properly.

CALLING FOR SERVICE

Before requesting service please review this owner's guide to correct minor complaints. If you are unable to correct the problem, consult your MITSUBISHI Dealer or MITSUBISHI Authorized Warranty Service Center.

Do not adjust any controls not described in this owner's guide.

Do not remove the protective back cover of this unit.

— MEMO —

— MEMO —

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